



US 20150124613A1

(19) **United States**(12) **Patent Application Publication****Yu et al.**(10) **Pub. No.: US 2015/0124613 A1**(43) **Pub. Date: May 7, 2015**(54) **DISTRIBUTED ANCHOR DENB SOLUTION  
FOR MOBILE RELAY****H04L 12/803** (2006.01)**H04W 8/02** (2006.01)(75) Inventors: **Ling Yu**, Oulu (FI); **Vinh Van Phan**,  
Oulu (FI); **Kari Veikko Horneman**,  
Oulu (FI)(52) **U.S. Cl.****CPC** ..... **H04W 8/186** (2013.01); **H04W 8/02**  
(2013.01); **H04W 64/006** (2013.01); **H04L**  
**47/125** (2013.01); **H04W 88/005** (2013.01)(73) Assignee: **NOKIA SOLUTIONS AND  
NETWORKS OY**, Espoo (FI)

(57)

**ABSTRACT**(21) Appl. No.: **14/397,499**(22) PCT Filed: **May 14, 2012**(86) PCT No.: **PCT/EP2012/058953**

§ 371 (c)(1),

(2), (4) Date: **Oct. 28, 2014**(30) **Foreign Application Priority Data**

May 11, 2012 (EP) ..... PCT/EP2012/058838

**Publication Classification**(51) **Int. Cl.****H04W 8/18** (2006.01)**H04W 64/00** (2006.01)

It is provided an apparatus, comprising storing means adapted to store a group identifier of a cooperative group of one or more network nodes and related one or more node identifiers, wherein each node identifier is related to a network node in the cooperative group; selecting means adapted to select at least one of the network nodes in the cooperative group to provide a gateway function for a relay node upon a request received from the relay node, wherein the request comprises the group identifier of the cooperative group; providing means adapted to provide the respective node identifiers of the at least one selected network node to an access network node for which the providing means is aware that the relay node is connected to the access network node via a radio interface, and to provide an identification of the access network node to each of the at least one selected network node.

